

## Patent Abstracts of Japan

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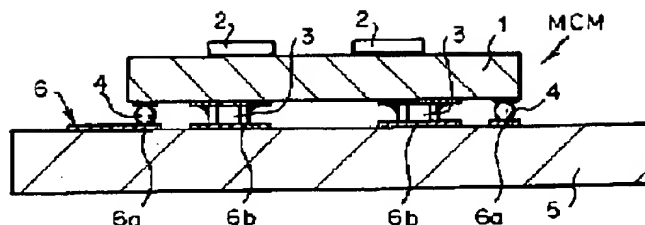
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APPLICANT : NEC CORP;

INVENTOR : SUZUKI MOTOHARU;

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TITLE : MOUNTING STRUCTURE FOR  
MULTICHIP MODULE



**ABSTRACT :** **PROBLEM TO BE SOLVED:** To prevent a multichip module having a plurality of chip components mounted from sinking due to its own weight caused by the crush of a BGA solder ball, and to prevent a chip component from coming into contact with the wiring pattern of a mother board and short-circuiting, on the occasion of mounting the multichip module on the mother board using BGA solder balls.

**SOLUTION:** Under the condition of mounting a multichip module MCM having chip components 2, 3 mounted on a board 1, on a mother board 5 by BGA solder balls 4, the chip component 3 is in contact with a mounting pad 6b as a dummy pad formed on the mother board 5. It becomes unnecessary to provide a clearance between the chip component 3 and the mother board 5, and it becomes possible to reduce the height of the mounting construction and to prevent the short circuit of the chip component 3 with wirings 6 on the mother board 5. It becomes unnecessary to increase the diameter of the BGA solder balls 4 more than needed to secure a clearance, and to use BGA solder balls containing metal cores, so it becomes possible to realize the size reduction of the mounting construction and the facilitation of constitution.

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# PATENT ABSTRACTS OF JAPAN

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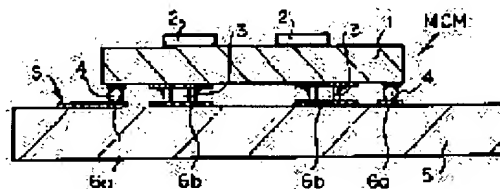
(72)Inventor : SUZUKI MOTOHARU

## (54) MOUNTING STRUCTURE FOR MULTICHIP MODULE

### (57)Abstract:

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